

CLAIMS

What is claimed is:

- 1 1. A computer system comprising:
 - 2 a processor;
 - 3 a video display subsystem including a video display and a video driver
 - 4 component that is coupled to the processor;
 - 5 a storage device on which data are stored, coupled to the processor; and
 - 6 a memory in which a plurality of machine instructions are stored including a
 - 7 forecast and revenue management tool that when executed by the processor
 - 8 generates and displays forecast information corresponding to an organization by
 - 9 performing the operations of:
 - 10 enabling hierarchy data defining a hierarchy structure of the organization to
 - 11 be stored on the storage device, including data identifying a hierarchical position of
 - 12 members of the organization;
 - 13 enabling forecast data corresponding to members of the organization to be
 - 14 stored on the storage device;
 - 15 enabling visibility rules that specify the forecast data that are visible to each
 - 16 member of the organization to be stored on the storage device;
 - 17 enabling a forecast to be generated for any member of the organization for
 - 18 which a forecast is applicable, wherein each forecast that is generated is based on
 - 19 forecast data that are visible to the member to whom that forecast corresponds as
 - 20 specified by the visibility rules; and
 - 21 displaying data corresponding to the forecast on the video display.

1 2. The computer system of claim 1, wherein the hierarchy structure comprises a
2 plurality of management levels and wherein execution of the machine instructions by
3 the processor further performs the operations of:

4 enabling visibility rules that specify the forecast data that are visible to each
5 management level of the organization to be stored on the storage device; and

6 enabling a forecast to be generated for any management level of the
7 organization, wherein each forecast that is generated is based on forecast data that
8 are visible to the management level for which that forecast corresponds as specified
9 by the visibility rules.

1 3. The computer system of claim 1, wherein a forecast is generated for a
2 manager and wherein the visibility rules include a maximum hierarchy depth search
3 value n defining a search scope such that the forecast for the manager is generated
4 from the manager's own forecast data and from forecast data corresponding to
5 members of the organization who are defined to be both subordinate to the manager
6 and occupy a management level in the hierarchy that is $\leq n$ levels below a
7 management level occupied by the manager.

1 4. The computer system of claim 1, wherein execution of the machine
2 instructions by the processor further performs the operations of:

3 enabling a forecast series comprising a set of parameters that define
4 attributes of forecasts that are based thereon to be stored on the storage device;
5 and

6 using the set of parameters in the forecast series to generate the forecast.

1 5. The computer system of claim 1, wherein execution of the machine
2 instructions by the processor further performs the operations of:
3 enabling a member of the organization to submit a forecast to a superior; and
4 preventing the member from modifying the forecast after it has been
5 submitted.

1 6. The computer system of claim 5, wherein execution of the machine
2 instructions by the processor further perform the operation of presenting forecast
3 data in a graphical format that enables a member to compare forecast data
4 corresponding to related forecasts over time that are specified to be visible to that
5 member.

1 7. A computer system comprising:
2 a processor;
3 a video display subsystem including a video display and a video driver
4 component that is coupled to the processor;
5 a storage device on which data are stored, coupled to the processor; and
6 a memory in which a plurality of machine instructions are stored including a
7 forecast and revenue management tool that when executed by the processor
8 generates and displays forecast information corresponding to an organization by
9 performing the operations of:
10 enabling hierarchy data defining members of an organization and a
11 hierarchical position held by each member to be stored on the data storage device;
12 enabling sets of forecast data to be stored on the data storage device, each
13 set of forecast data corresponding to a respective member of the organization;

14 generating a forecast for a manager member of the organization based on a
15 set of forecast data corresponding to the manager and at least one set of forecast
16 data corresponding to one or more subordinates, each subordinate being a member
17 of the organization who has a hierarchical position that is defined to be subordinate
18 to manager by the hierarchy data; and

19 presenting information pertaining to the forecast on the video display in a
20 manner that enables the manager to view the set of forecast information for the
21 manager and sets of forecast data for each subordinate in both aggregated and
22 separated formats.

1 8. The computer system of claim 7, wherein execution of the machine
2 instructions by the processor further performs the operation of enabling the manager
3 to adjust values of data pertaining to a set of forecast data corresponding to a
4 subordinate such that the forecast for the manager considers the adjusted values
5 rather than original values of the data that are adjusted.

1 9. The computer system of claim 8, wherein the original values of any data that
2 are adjusted are preserved such that the subordinate is enabled to see only the
3 original values and not the adjusted values in the subordinate's set of forecast data.

1 10. The computer system of claim 8, wherein execution of the machine
2 instructions by the processor further performs the operation of providing a forecast
3 adjustment history mechanism that enables the manager to view a historical record
4 of adjustments made to the set of forecast data pertaining to the manager's forecast
5 and sets of forecast data pertaining to said one or more subordinates of the
6 manager.

1 11. The computer system of claim 8, wherein execution of the machine
2 instructions by the processor further performs the operation of enabling a superior of
3 the manager to view both the original and adjusted values of the values adjusted by
4 the manager.

1 12. A computer system comprising:
2 a processor;
3 a video display subsystem including a video display and a video driver
4 component that is coupled to the processor;
5 a storage device on which data are stored, coupled to the processor; and
6 a memory in which a plurality of machine instructions are stored including a
7 forecast and revenue management tool that when executed by the processor
8 generates and displays forecast information corresponding to an organization by
9 performing the operations of:
10 enabling hierarchy data defining members of an organization and a
11 hierarchical position held by each member to be stored on the storage device;
12 enabling forecast data corresponding to members of the organization to be
13 stored on the storage device on the machine;
14 determining an identity of a current forecast participant who is a member of
15 the organization and using the computer system;
16 identifying members of the organization who are subordinate to the current
17 forecast participant based on the hierarchy data;
18 generating forecasts for one or more members of the organization who are
19 identified as being subordinate to the current forecast participant; and

20 presenting forecast data to the current forecast participant via the video
21 display such that the current forecast participant may view forecast data specific to
22 each of said one or more subordinate members and view forecast data that are
23 aggregated across the forecasts of said one or more subordinate members.

1 13. The computer system of claim 12, wherein the current forecast participant is
2 a manager whose forecast is determined, at least in part, on forecasts that are
3 submitted by one or more selected members of the organization who are
4 subordinate to the manager, and wherein execution of the machine instructions by
5 the processor further performs the operations of:

6 automatically generating a forecast for any member among said one or more
7 selected members who has yet to submit a forecast; and

8 generating a forecast for the manager based on a combination of forecasts
9 submitted by said one or more selected members and any forecast that are
10 automatically generated.

1 14. The computer system of claim 13, wherein the manager occupies at least a
2 second level of management in the organization's hierarchy and automatically
3 calculating forecasts for said one or more selected members of the organization
4 who are subordinate to the manager and have not submitted their forecast is applied
5 in a recursive manner from lower levels to higher levels in the organization's
6 hierarchy.

1 15. A system comprising:
2 a computer server including:
3 a processor;

4 a video display subsystem including a video display and a video driver
5 component that is coupled to the processor;

6 a network adapter, coupled to the processor to enable the computer to
7 send and receive data over a computer network;

8 a storage device coupled to the processor on which a plurality of
9 interactive HTML software components are stored; and

10 a memory in which a plurality of machine instructions are stored that
11 when executed by the processor performs the operations of:

12 providing access to hierarchy data stored in a database defining a hierarchy
13 structure of an organization, including data identifying a hierarchical position of
14 members of the organization;

15 enabling visibility rules that specify the forecast data that are visible to each
16 member of the organization to be stored in a database;

17 sending data comprising a set of interactive HTML components via the
18 computer network to a client, a portion of which enable forecast data corresponding
19 to members of the organization to be entered into the database via the client;

20 enable a forecast to be generated for any member of the organization for
21 which a forecast is applicable, wherein each forecast that is generated is based on
22 forecast data that are visible to the member to whom that forecast corresponds as
23 specified by the visibility rules; and

24 sending forecast data corresponding to the forecast to the client based in a
25 manner that enables the forecast data to be viewed by a user through use of the set
26 of interactive HTML components.

1 16. The computer system of claim 15, wherein the hierarchy structure comprises
2 a plurality of management levels and wherein execution of the machine instructions
3 by the computer server processor further performs the operations of:

4 enabling visibility rules that specify the forecast data that are visible to each
5 management level of the organization to be stored in the database; and

6 enabling a forecast to be generated for any management level of the
7 organization, wherein each forecast that is generated is based on forecast data that
8 are visible to the management level for which that forecast corresponds as specified
9 by the visibility rules.

1 17. The system of claim 15, wherein a forecast is generated for a manager and
2 wherein the visibility rules include a maximum hierarchy depth search value n
3 defining a search scope such that the forecast for the manager is generated from
4 the manager's own forecast data and from forecast data corresponding to members
5 of the organization who are defined to be both subordinate to the manager and
6 occupy a management level in the hierarchy that is $\leq n$ levels below a
7 management level occupied by the manager.

1 18. The system of claim 15, wherein execution of the machine instructions by the
2 computer server processor further performs the operations of:

3 enabling a forecast series comprising a set of parameters that define
4 attributes of forecasts that are based thereon to be stored in the database; and
5 using the set of parameters in the forecast series to generate the forecast.

1 19. The system of claim 15, wherein the interactive HTML components further
2 performs the operations of:

3 enabling a member of the organization to submit a forecast to a superior; and
4 preventing the member from modifying the forecast after it has been
5 submitted.

1 20. The system of claim 19, wherein execution of the machine instructions by the
2 computer server processor further performs the operation of enabling the superior to
3 which the forecast was submitted and/or a system administrator to unsubmit the
4 forecast such that the member who submitted that forecast is enabled to modify the
5 forecast.

1 21. The system of claim 15, wherein execution of the machine instructions on the
2 computer server processor further performs the operation of sending data to the
3 client, and wherein the set of interactive HTML components enable the forecast data
4 to be presented in a graphical format that enables a member to compare forecast
5 data corresponding to related forecasts over time that are specified to be visible to
6 that member.

1 22. The system of claim 15, further comprising a database server on which the
2 database is hosted, linked in communication with the computer server via the
3 network.

1 23. A system comprising:
2 a computer server including:
3 a processor;
4 a video display subsystem including a video display and a video driver
5 component that is coupled to the processor;

6 a network adapter, coupled to the processor to enable the computer
7 server to send and receive data over a computer network;

8 a storage device coupled to the processor on which a plurality of
9 interactive HTML software components are stored; and

10 a memory in which a plurality of machine instructions are stored that
11 when executed by the processor performs the operations of:

12 enabling hierarchy data defining members of an organization and a
13 hierarchical position held by each member to be stored in a database;

14 sending data comprising a set of interactive HTML components via the
15 computer network to a client, a portion of which enable sets of forecast data to be
16 input into the database via the client, each set of forecast data corresponding to a
17 respective member of the organization;

18 generating a forecast for a manager member of the organization based on a
19 set of forecast data corresponding to the manager and at least one set of forecast
20 data corresponding to one or more subordinates, each subordinate being a member
21 of the organization who has a hierarchical position that is defined to be subordinate
22 to manager by the hierarchy data; and

23 sending forecast data corresponding to the forecast to the client,

24 wherein the set of interactive HTML components enable the forecast data to
25 be presented in a manner that enables the manager to view the set of forecast
26 information for the manager and sets of forecast data for each subordinate in both
27 aggregated and separated formats.

1 24. The system of claim 23, wherein the set of HTML components in combination
2 with execution of the machine instruction by the computer server processor further
3 enable the manager using the client to adjust values of data pertaining to a set of

4 forecast data corresponding to a subordinate and storing the adjusted values in the
5 database such that the forecast for the manager considers the adjusted values
6 rather than original values of the data that are adjusted.

1 25. The system of claim 24, wherein forecast data sent to the client is filtered
2 based on an identity of the user such that a subordinate user is enabled to see only
3 the original values and not the adjusted values in the subordinate's set of forecast
4 data.

1 26 The system of claim 24, wherein execution of the machine instructions on the
2 computer server processor in combination with the set of interactive HTML
3 components on the client further perform the operation of providing a forecast
4 adjustment history mechanism that enables the manager to view a historical record
5 of adjustments made to the set of forecast data pertaining to the manager's forecast
6 and sets of forecast data pertaining to said one or more subordinates of the
7 manager.

1 27. The system of claim 24, wherein execution of the machine instructions by the
2 computer server processor further perform the operation of enabling a superior of
3 the manager to view both the original and adjusted values of the values adjusted by
4 the manager.

1 28. A system comprising:
2 a computer server including:
3 a processor;

4 a video display subsystem including a video display and a video driver
5 component that is coupled to the processor;

6 a network adapter, coupled to the processor to enable the computer to
7 send and receive data over a computer network;

8 a storage device coupled to the processor on which a plurality of
9 interactive HTML software components are stored; and

10 a memory in which a plurality of machine instructions are stored that
11 when executed by the processor performs the operations of:

12 enabling hierarchy data defining members of an organization and a

13 hierarchical position held by each member to be stored in a database;

14 sending data corresponding to a set of interactive HTML components via the
15 computer network to a client that enable forecast data corresponding to members of
16 the organization to be entered by a user of the client and stored in the database;

17 determining an identity of a current forecast participant who is a member of
18 the organization and using the client;

19 identifying members of the organization who are subordinate to the current
20 forecast participant based on the hierarchy data;

21 generating forecasts for one or more members of the organization who are
22 identified as being subordinate to the current forecast participant; and

23 sending forecast data to the client to be displayed to the user via the set of
24 interactive HTML components, wherein the forecast data sent to the user enables
25 the current forecast participant to view forecast data specific to each of said one or
26 more subordinate members and view forecast data that are aggregated across the
27 forecasts of said one or more subordinate members.

1 29. The machine-readable media of claim 28, wherein the current forecast
2 participant is a manager whose forecast is determined, at least in part, on forecasts
3 that are submitted by one or more selected members of the organization who are
4 subordinate to the manager, and wherein execution of the machine instructions on
5 the computer server processor further performs the operations of:

6 automatically generating a forecast for any member among said one or more
7 selected members who has yet to submit a forecast; and

8 generating a forecast for the manager based on a combination of forecasts
9 submitted by said one or more selected members and any forecast that are
10 automatically generated.

1 30. The system of claim 31, wherein the manager occupies at least a second
2 level of management in the organization's hierarchy and automatically calculating
3 forecasts for said one or more selected members of the organization who are
4 subordinate to the manager and have not submitted their forecast is applied in a
5 recursive manner from lower levels to higher levels in the organization's hierarchy.

1 31. A computer system comprising:

2 a processor;

3 a video display subsystem including a video display and a video driver
4 component that is coupled to the processor;

5 a storage device on which data are stored, coupled to the processor;

6 a network adapter coupled to the processor to enable the computer system to
7 submit data to and retrieve data from a remote database, said remote database
8 including hierarchy data defining a hierarchy structure of an organization, including
9 data identifying a hierarchical position of members of the organization; and

10 a memory in which a plurality of machine instructions are stored including a
11 forecast and revenue management tool that when executed by the processor
12 generates and displays forecast information corresponding to the organization by
13 performing the operations of:

14 enabling forecast data corresponding to members of the organization to be
15 stored on the remote database;

16 enabling visibility rules that specify the forecast data that are visible to each
17 member of the organization to be stored on the storage device;

18 enabling a forecast to be generated for any member of the organization for
19 which a forecast is applicable, wherein each forecast that is generated is based on
20 forecast data that are visible to the member to whom that forecast corresponds as
21 specified by the visibility rules and retrieved from the remote database to generate
22 the forecast; and

23 displaying data corresponding to the forecast on the video display.

1 32. The computer system of claim 31, wherein the hierarchy structure comprises
2 a plurality of management levels and wherein execution of the machine instructions
3 by the processor further performs the operations of:

4 enabling visibility rules that specify the forecast data that are visible to each
5 management level of the organization to be stored on the remote database; and

6 enabling a forecast to be generated for any management level of the
7 organization, wherein each forecast that is generated is based on forecast data that
8 are visible to the management level for which that forecast corresponds as specified
9 by the visibility rules and retrieved from the remote database.

1 33. The computer system of claim 31, wherein a forecast is generated for a
2 manager and wherein the visibility rules include a maximum hierarchy depth search
3 value n defining a search scope such that the forecast for the manager is generated
4 from the manager's own forecast data and from forecast data corresponding to
5 members of the organization who are defined to be both subordinate to the manager
6 and occupy a management level in the hierarchy that is $\leq n$ levels below a
7 management level occupied by the manager.

1 34. The computer system of claim 1, wherein execution of the machine
2 instructions by the processor further performs the operations of:
3 enabling a forecast series comprising a set of parameters that define
4 attributes of forecasts that are based thereon to be stored on the remote database;
5 and
6 retrieving the set of parameters in the forecast series from the remote
7 database to generate the forecast.

1 35. The computer system of claim 31, wherein execution of the machine
2 instructions by the processor further performs the operations of:
3 enabling a member of the organization to submit a forecast to a superior; and
4 preventing the member from modifying the forecast after it has been
5 submitted.

1 36. The computer system of claim 35, wherein execution of the machine
2 instructions by the processor further performs the operation of presenting forecast
3 data in a graphical format that enables a member to compare forecast data

4 corresponding to related forecasts over time that are specified to be visible to that
5 member.

1 37. A computer system comprising:
2 a processor;
3 a video display subsystem including a video display and a video driver
4 component that is coupled to the processor;
5 a storage device on which data are stored, coupled to the processor;
6 a network adapter coupled to the processor to enable the computer system to
7 submit data to and retrieve data from a remote database, said remote database
8 including hierarchy data defining a hierarchy structure of an organization, including
9 data identifying a hierarchical position of members of the organization; and
10 a memory in which a plurality of machine instructions are stored including a
11 forecast and revenue management tool that when executed by the processor
12 generates and displays forecast information corresponding to the organization by
13 performing the operations of:
14 enabling sets of forecast data to be stored on the remote database, each set
15 of forecast data corresponding to a respective member of the organization;
16 generating a forecast for a manager member of the organization based on a
17 set of forecast data corresponding to the manager and at least one set of forecast
18 data corresponding to one or more subordinates, each subordinate being a member
19 of the organization who has a hierarchical position that is defined to be subordinate
20 to manager by the hierarchy data; and
21 presenting information pertaining to the forecast on the video display in a
22 manner that enables the manager to view the set of forecast information for the

23 manager and sets of forecast data for each subordinate in both aggregated and
24 separated formats.

1 38. The computer system of claim 37, wherein execution of the machine
2 instructions by the processor further performs the operation of enabling the manager
3 to adjust values of data pertaining to a set of forecast data corresponding to a
4 subordinate such that the forecast for the manager considers the adjusted values
5 rather than original values of the data that are adjusted.

1 39. The computer system of claim 38, wherein the original values of any data that
2 are adjusted are stored in the database and filtered such that the subordinate is
3 enabled to see only the original values and not the adjusted values in the
4 subordinate's set of forecast data.

1 40. The computer system of claim 38, wherein execution of the machine
2 instructions by the processor further performs the operation of submitting data
3 snapshots to the remote database so as to provide a forecast adjustment history
4 mechanism that enables the manager to view a historical record of adjustments
5 made to the set of forecast data pertaining to the manager's forecast and sets of
6 forecast data pertaining to said one or more subordinates of the manager.

1 41. The computer system of claim 38, wherein execution of the machine
2 instructions by the processor further performs the operation of enabling a superior of
3 the manager to view both the original and adjusted values of the values adjusted by
4 the manager by retrieving appropriate data from the remote database.

1 42. A computer system comprising:
2 a processor;
3 a video display subsystem including a video display and a video driver
4 component that is coupled to the processor;
5 a storage device on which data are stored, coupled to the processor;
6 a network adapter coupled to the processor to enable the computer system to
7 submit data to and retrieve data from a remote database, said remote database
8 including hierarchy data defining a hierarchy structure of an organization, including
9 data identifying a hierarchical position of members of the organization; and
10 a memory in which a plurality of machine instructions are stored including a
11 forecast and revenue management tool that when executed by the processor
12 generates and displays forecast information corresponding to the organization by
13 performing the operations of:
14 enabling forecast data corresponding to members of the organization to be
15 stored on the stored on the remote database;
16 determining an identity of a current forecast participant who is a member of
17 the organization and using the computer system;
18 identifying members of the organization who are subordinate to the current
19 forecast participant based on the hierarchy data;
20 generating forecasts for one or more members of the organization who are
21 identified as being subordinate to the current forecast participant; and
22 presenting forecast data to the current forecast participant via the video
23 display such that the current forecast participant may view forecast data specific to
24 each of said one or more subordinate members and view forecast data that are
25 aggregated across the forecasts of said one or more subordinate members.

1 43. The computer system of claim 42, wherein the current forecast participant is
2 a manager whose forecast is determined, at least in part, on forecasts that are
3 submitted by one or more selected members of the organization who are
4 subordinate to the manager, and wherein execution of the machine instructions by
5 the processor further performs the operations of:

6 automatically generating a forecast for any member among said one or more
7 selected members who has yet to submit a forecast; and

8 generating a forecast for the manager based on a combination of forecasts
9 submitted by said one or more selected members and any forecast that are
10 automatically generated.

1 44. The computer system of claim 13, wherein the manager occupies at least a
2 second level of management in the organization's hierarchy and automatically
3 calculating forecasts for said one or more selected members of the organization
4 who are subordinate to the manager and have not submitted their forecast is applied
5 in a recursive manner from lower levels to higher levels in the organization's
6 hierarchy.